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Trechona rufa (Araneae, Dipluridae): new status, redescription and neotype designation with notes on the genus

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Abstract. In this paper, *Trechona venosa rufa* Vellard 1924 is elevated to species rank, a neotype is designated, the male is described for the first time, and the female is redescribed. *Trechona rufa* seems to be restricted to the Atlantic Forest of São Paulo state, southeastern Brazil, covering an area along the coast and going up to the southern slope of the Mantiqueira mountain chain. The composition and distribution of the genus *Trechona* is changed. As a result, only three valid species remain in *Trechona*, all inhabiting the Atlantic Forest of Brazil. The other species formerly included in *Trechona* are considered below: *T. lycosiformis* (C.L. Koch 1842) = *Avicularia lycosiformis* comb. nov., Theraphosidae *incertae sedis*; *T. sericata* (Karsch 1879) = *Linothele sericata* (Karsch 1879), Dipluridae *incertae sedis*; *T. adspersa* Bertkau 1880 = Nemesiidae incertae sedis; *T. rogenhoferi* (Ausserer 1871) = *nomen dubium*.

Keywords: Taxonomy, Brazil, Neotropics, Atlantic Forest, Mygalomorphae

The genus *Trechona* Koch 1850 includes spiders with a body size up to 50 mm. The genus may be recognized by the well developed lyra on the internal side of the pedipalp maxilla. This stridulating apparatus (Raven 1985:fig. 30) is formed by numerous rigid setae, sorted in two size classes: approximately 15–20 mm long, robust setae, placed in one wide series (the middle setae are the longest and strongest ones, bearing a distinctly club-shaped apex on each one), and 50 or more shorter, thinner setae, disposed in several smaller series. The shorter setae are placed posteriorly to and cover most of the extension of the series of longer setae, forming a large black to reddish brown setal plate. This setal plate is strikingly different from the single series of up to 10–20 clavate setae found in the known species of *Diphura* Koch 1850 (Raven 1985:fig. 20). Excepting *Diphura*, the other diplurids lack lyra (Raven 1985). In *Trechona*, the setae of the lyra are probably rubbed against the pecten, formed by 6–9 strong, erect setae placed at the outer, basal margin of the chelicera. Adult *Trechona* have a brownish to black coloration, usually forming transverse light stripes (zebra pattern) on the dorsum of the abdomen. Currently, six species and one subspecies are included in *Trechona*, distributed from Brazil to Guyana and Colombia (Platnick 2008).

Vellard (1924) redescribed the female of *T. venosa* (Latreille 1832), based on several specimens from Rio de Janeiro and Niterói, both localities in Rio de Janeiro state. He described an additional male he attributed to *T. venosa* based on a specimen from Fortaleza de Minas, Minas Gerais state. In the same paper, he briefly described *T. venosa rufa* Vellard 1924, a new subspecies with lighter coloration than *T. venosa venosa*, based on the female holotype from Cubatão, São Paulo state (and not a male holotype as misprinted in Pedroso & Baptista 2004). In the same paper, Vellard also cited two additional females of *T. v. rufa* from unknown localities in the same state. Bücherl (1957) claimed that the status of *T. v. rufa* as a separate subspecies was doubtful, as he considered its somatic and genital characteristics as identical to those of *T. v. venosa*. Nonetheless, he cautioned that the limited number of available specimens did not allow a sound decision on the division of *T. venosa* into subspecies. Pedroso & Baptista (2004) redescribed *T. venosa venosa* and pointed out that *T. v. rufa* was probably a separate species. However, they did not formally elevate *T. v. rufa* to species rank as more specimens were needed to clearly separate both species and to establish the boundaries between their geographic distributions.

This paper aims to redescribe *Trechona rufa*, raise it to species rank, designate a neotype and describe the male for the first time. We also wish to throw some light on the tangled taxonomy and distribution of the genus *Trechona*.

METHODS

The color pattern was based in specimens preserved in 75% ethanol, supplemented by information based on living specimens. Measurements and illustrations were made with a Wild Heerbrugg M8 stereoscopic microscope, camera lucida, and micrometric eye-piece. Measurements are given in millimeters. Cephalothorax length was measured from the posterior border of the cephalothorax to the anterior margin of the chelicerae. Total length was measured from the posterior border of the anal tubercle to the anterior margin of the chelicerae, not including the spinnerets. Each article of the pedipalp and the first leg was measured in retrolateral view, from the basal condylus to the distal one. The number of specimens measured is given in parentheses, followed by the modal value and by the range of variation in parentheses. The distribution map was elaborated through the use of geographical coordinates obtained from Global Gazetteer version 2.1 (Online at http://www.fallingrain.com/world, last accessed 20 October 2007).

As usual, the vulva was examined through dissection of the genital region of the females. The piece containing the vulva was then cleaned and immersed in a proteolytic enzyme

solution (Prolase 300) for 24 hours. After clearing, a temporary mounting of the vulva was made using glycerol gel and an excavated glass slide.

Abbreviations used: IBSP - Instituto Butantan, São Paulo, Brazil; IRSNB – Institut Royal de Sciences Naturelles de Belgique; MNRJ - Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil. FIOCRUZ – Fundação Oswaldo Cruz, Rio de Janeiro, Brazil; ZMHB – Zoologisches Museum, Humboldt Universität, Berlin, Germany. Additional information and color pictures of *Trechona* are available on our website: http://www.museunacional.ufrj.br/mndi/Aracnologia/Trechona.htm.

TAXONOMY

Trechona C.L. Koch 1850

Mygale Lamarck 1802 (in part)
Onysopelma Simon 1864:68; Ausserer 1871:197 (synonym)
Pezionyx Simon 1864:530, 538 (*nomen superfluum* for *Onysopelma*)
Eudiplura Simon 1892:179; Raven 1985:75 (synonym)

As noted in the Introduction, Raven (1985) stated that there are up to 10 clavate setae in the known species of *Diplura* Koch 1850, arranged in a single series. However, we have examined specimens of several *Diplura* species, including undescribed ones, with a higher number of setae (14, 15, and up to 20). It follows that the most useful character to diagnose species of *Trechona* and *Diplura* in relation to the lyra is not the number of large setae but the presence in *Trechona* of several series of clavate setae arranged in a plate, with the first series composed of much larger clavate setae than the other ones (compare Raven 1985, figs. 20 and 30)

As the preliminary results of our ongoing work on *Trechona* suggest, the genus composition and distribution need thorough revision. Most *Trechona* species now considered as valid are herein transferred to other genera and families or suffer a change in status.

Trechona rufa Vellard 1924 new status
(Figs. 1–9)

Trechona venosa rufa Vellard 1924:157.
Trechona venosa rufa: Bücherl 1957:387; Pedroso & Baptista 2004:150, 151, 153.

Type-localities.—BRAZIL: *São Paulo*: Cubatão, M. Lutz (Female holotype, FIOCRUZ, lost). Female neotype, herein designated: *São Paulo*: Cubatão. Gerard Bandet (F, IBSP 1910 N).

Diagnosis.—The short spermatheca and copulatory bulb of *Trechona rufa* are similar to *T. venosa*. The female of *T. rufa* has a short spermatheca with a lobulate spermathecal head (Fig. 4) and two rows of black setae dividing the scopula of tarsus III (Fig. 1). In *T. venosa*, the spermathecal head is rounded, without lobes, and the scopula of tarsus III is undivided, without setae. The male of *T. rufa* has a globular bulb, with a large distal membrane (Figs. 6–8). In contrast, the male of *T. venosa* has a piriform bulb, with a smaller distal membrane. Both sexes of *T. rufa* also have a lighter color pattern than *T. venosa*, with a predominance of brownish or reddish-brown hues. Also, *T. rufa* is smaller (body length 38.5–44.1, male 25.7–36.5) than *T. venosa* (body length 46.3–56.7, male 37–39.4). For *T. venosa* characters, see Pedroso & Baptista (2004).

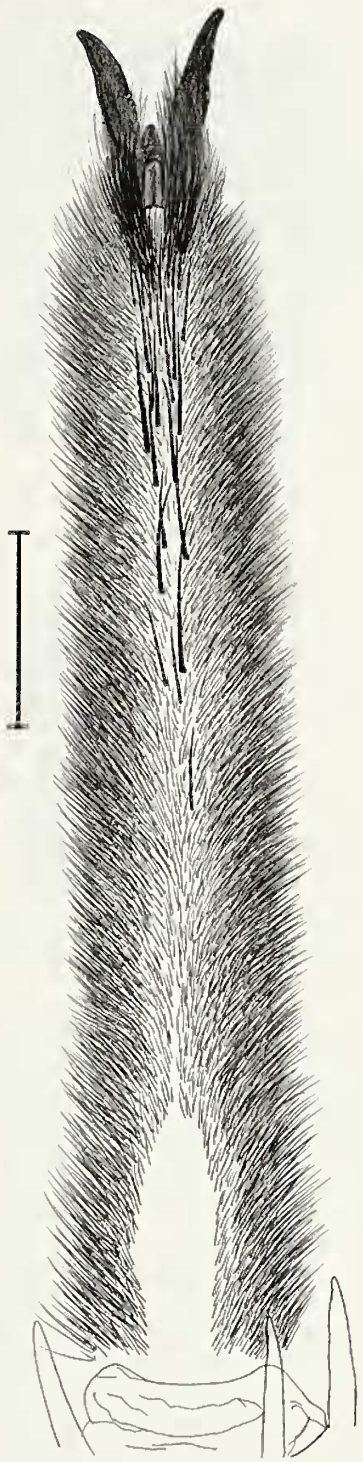

Figure 1.—Female (MNRJ 4175) from Atibaia, São Paulo state. Tarsus III, ventral view. Scale = 1 mm.

Description.—*Measurements.* Body total length. Females (n = 5): 40.3 (38.5–44.1). Males (n = 5): 31.7 (25.7–36.5). Carapace length. Females (n = 5): 16.1 (14.2–18.3). Males (n = 5): 13.6 (11.4–15.5). Leg I total length. Females (n = 5): 57.5 (54.0–61.8). Males (n = 5): 69.8 (65.0–75.5).

Female: Cephalothorax: dorsum brown or reddish-brown, with gray covering setae and some scattered black setae.

Figure 2.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Joint tibia-metatarsus I (left), ventral view. Scale = 1 mm.

Figure 3.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Joint tibia-metatarsus I (left), retrolateral view. Scale = 1 mm.

Clypeus with an average of eight erect setae, turned forward. Anterior portion of the eye tubercle with some small erect setae. Eye tubercle darker than the surrounding areas. Chelicerae black or dark reddish-brown, turning to black in direction of the distal portion. Sternum colored as the carapace, with gray covering setae and black erect setae scattered throughout the surface. Labium colored as the carapace, but its base is a bit darker. Without covering setae and with black setae thinner than the ones found at the sternum. Abdomen: dark brown, with six beige stripes, shaped as chevrons or a series of inverted "V" over the dorsum and sides. Setae black, erect, spread over the dorsum. Spinnerets with three equal-sized articles. Pedipalps: dark brown, with glabrous, shiny, longitudinal stripes. Coxa without spines. Ventral face covered by thin setae and black erect setae, which get thinner towards the reddish maxillary scopula. Anterior area with around 25 distinct cuspules. Dorsal face with setae covering the distal portion. Trochanter without spines. Dorsal face with setae covering the distal portion. Femur with one single lateral and two unpaired dorsal spines. Patella with a basal prolateral spine. Tibia bearing 10–13 spines, not arranged in rows, its ventral face with one basal, one medial, and two distal pairs. The remaining spines are placed on the prolateral and retrolateral sides. Tarsus with scopula and two spines on each side. Dorsal face with thin, covering, setae and several scattered, black, erect setae. Legs: color as in carapace, with glabrous, shiny, longitudinal stripes. Tarsi cracked (i.e., with cuticle presenting thin, membranous lines, separating the hard cuticle in pieces), especially on the ventral face, and with a row of trichobothria on the dorsal face. Tarsi I–IV with well marked scopula. Only metatarsi I–II with well marked scopula. Tarsi I–II with scopula interrupted by a small glabrous stripe and without black setae on the ventral side. Tarsi III–IV with scopula interrupted by a row of spiniform setae (Fig. 1). Leg I: coxa without spines. Ventral side with covering setae and black erect setae. Dorsal face with setae covering the distal portion. Trochanter as in pedipalp. Femur bearing four spines, from which three are dorsal and one, placed at the posterior portion, is prolateral. Patella without spines. Glabrous stripes wider than those found in femur and tibia. Tibia with one pair of ventral spines near the distal

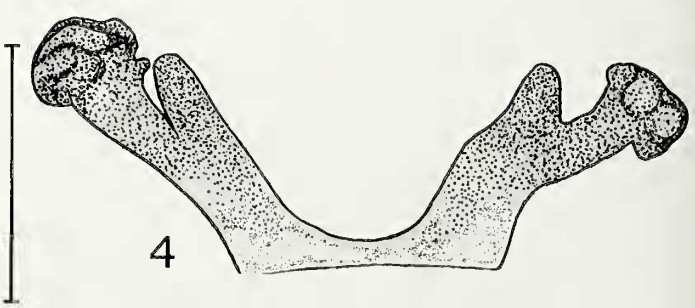

Figure 4.—Female (MNRJ 4175) from Atibaia, São Paulo state. Spermatheca, dorsal view. Scale = 1 mm.

Figure 5.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Pedipalp (left), terminal articles and bulb, retrolateral view. Scale = 1 mm.

Figure 6.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Bulb (left), retrolateral view. Scale = 1 mm.

margin and one or two unpaired spines at the basal portion. Prolateral face with one or two unpaired spines. Metatarsus bearing four or five spines on the ventral side, from which two to three unpaired ones are found on the basal portion and one pair near the distal margin. Dorsal side as in tarsus I. Tarsus without spines, with ventral scopula. Covering setae and several black erect setae spread at the dorsal side. Leg II: coxa, trochanter, and femur as in leg I. Patella with a prolateral spine at the distal portion. Tibia bearing 6–7 spines, not arranged in rows, from which one ventral pair is placed at the distal margin. Metatarsus with six spines, from which one dorsal pair is placed near the distal margin, three unpaired dorsal spines at the basal region, and one prolateral spine at the middle portion. Dorsal side as in tarsus. Tarsus as tarsus I. Leg III: coxa and troehanter as in leg I. Femur with 7–10 spines on the dorsal and lateral faces. Patella as in leg II. Tibia with 10 spines. One pair at the basal region, one pair at the middle and one pair at the distal margin of the ventral face, the remaining spines are two unpaired at the prolateral face and two unpaired at the retrolateral face. Metatarsus with 13–18 spines, from which 5 are always placed on the distal margin. Scopula not well-marked. Tarsus with a small row of black setae interrupting the distal portion of the scopula. Leg IV: coxa and trochanter as in leg I. Femur with 4 to 6 spines at the dorsal face. Patella without spines. Tibia with 9–12 spines, not arranged in rows. Metatarsus with 16–20 spines. Scopula almost unnoticeable. Tarsus with a middle longitudinal row of black setae interrupting the whole length of the scopula. Genitalia (Fig. 4): vulva composed of two spermathecae connected by a common membranous atrium. Spermathecae with a roundish head slightly flattened at the distal end and a subdistal anterior branch of size varying from almost the same length as the head branch to much smaller than it.

Male: Cephalothorax: carapace with somewhat darker color than females, but similar thin, covering setae and stouter setae. Clypeus with five erect setae, turned frontward. Eye tubercle as in females. Chelicerae as in females, but shorter and less robust. Inner margin with a row of thirteen to sixteen teeth. Sternum brown, a bit lighter than the carapace, smaller than in females, but longer than wide. Labium as in females, but with fewer setae. Abdomen: dark brown or black, with black erect setae spread over the dorsum. Stripes as in females. Spinnerets a little longer than in the females, with the last article longer than the others. Pedipalps: coxa as in females. Trochanter without spines and with a few black erect setae. Ventral face with a knob covered with several black erect setae. Femur with five to six spines, placed at the dorsal and lateral faces. Patella without spines. Tibia bearing 7–9 spines, not arranged in rows. Tarsus short, cylindrical, parted in two at the distal portion around the bulb insertion. Copulatory bulb described in the male genitalia below. Tarsi long and

Figure 7.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Bulb (left), frontal view. Scale = 1 mm.

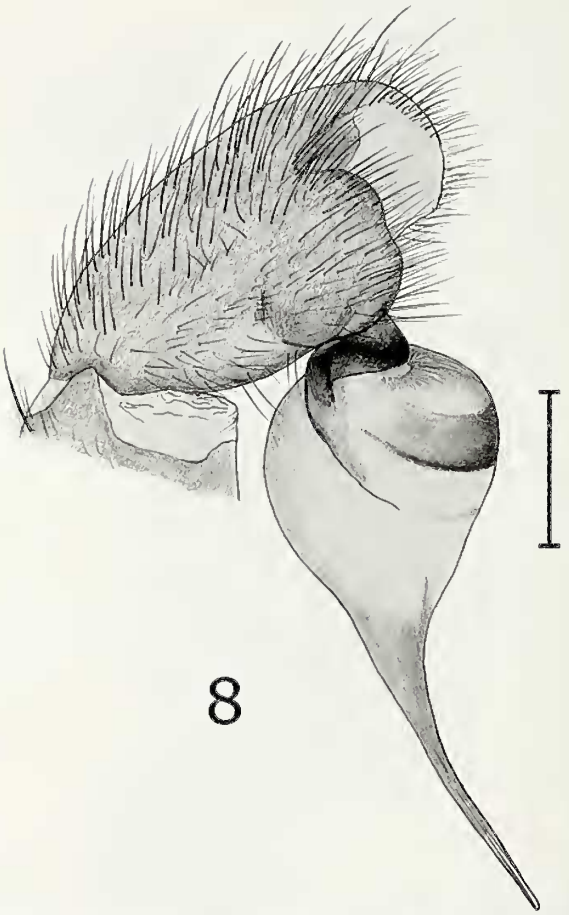

Figure 8.—Male (MNRJ 4179) from Ribeirão Grande, São Paulo state. Bulb (left), prolateral view. Scale = 1 mm.

distinctly cracked, with well-marked scopula. Dorsal face with black erect setae and few covering setae. A row of trichobothria placed between the spines over the length of the tarsi. Leg I: coxa and trochanter as in females. Femur with 7–11 spines, not arranged in rows, at the dorsal and lateral faces. Patella without spines or bearing one prolateral spine. Tibia with 6–9 spines, not arranged in rows. Distal margin with a large apophysis at the prolateral side (Figs. 2, 3). Metatarsus long and with scopula, bearing 5 spines, from which the ventral face has one at the distal margin and three at the basal and middle portions. Prolateral face with one spine. Basal portion displaying a shallow depression following a small knob bearing one spine (Figs. 2, 3). Leg II: coxa and trochanter as in leg I. Femur with 6–10 spines at the dorsal and lateral faces. Patella with one prolateral spine. Tibia as in leg I. Metatarsus long and with scopula, bearing 5–7 spines, not arranged in rows, from which one ventral pair is always found at the distal margin. Leg III: coxa and trochanter as in leg I. Femur with 10–12 spines at the dorsal and lateral faces. Patella as in leg II. Tibia bearing 8–11 spines, not arranged in rows, including one basal, one middle and one distal pair at the ventral side, and the remaining spines found in the lateral faces. Metatarsus long and with scopula, bearing 18–21 spines, not arranged in rows, from which 5 spines are always found at the distal margin. Leg IV: coxa and trochanter as in leg I. Femur with 9–12 spines at the dorsal and lateral faces. Patella without spines or bearing one prolateral spine. Tibia bearing 8–12 spines, not arranged in rows, from which one pair is always found at the distal margin. Metatarsus long and with scopula not well-marked, bearing 20–23 spines, not arranged in rows. Genitalia (Figs. 5–8): bulb almost piriform, with an "S"-shaped regular curve at its internal face (Figs. 5, 6), tapering regularly to a long, thin embolus, which bears a small whitish membranous area at its tip (Figs. 6–8).

Distribution.—Known only from the Atlantic Forest at São Paulo state, southeastern Brazil, spreading over a wide coastal area, from Ribeirão Grande to Ilhabela, and north up to Atibaia, at the southern slope of Mantiqueira mountain chain.

Material examined.—BRAZIL: *São Paulo*: no further locality (1 F, IBSP 3696); no further locality (1 F, IBSP 10804); no further locality, 14.IX.1965, inflicted bite in a patient of the Vital Brazil Hospital. (1 F, IBSP 1910 E); Barragem Passareuna (unknown locality). (1 F, IBSP 3569); Atibaia. XII.2002 (1 F, 1 young, MNRJ 04175); Atibaia. (1 young, IBSP 9754); Caraguatatuba, V-2007, S. Potsch et al., pitfall traps (2 M, MNRJ) Cubatão (1 M without palps, IBSP 1910); Cubatão. G. Bandet (2 F, IBSP 1910 N); Cubatão, Serra de Cubatão. VI.1972. G. Bandet (5 F, 1 young, IBSP 1910 Q); Diadema. 24.VII.1995. Tadeu (1 F, IBSP 10806); Diadema. 24.VII.1995. Tadeu (1 M, IBSP 10807); Diadema. 24.VII.1995. Tadeu (1 young, IBSP 10808); Diadema. 24.VII.1995. Tadeu (1 F, IBSP 10809); Diadema.

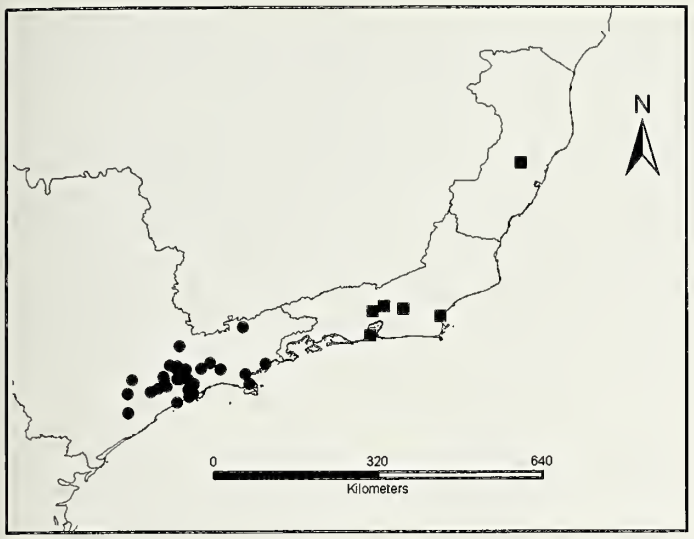

Figure 9.—Distribution of *Trechona rufa* (black circles) and *Trechona venosa* (black squares) in the states of Espírito Santo, Rio de Janeiro and São Paulo, Brazil.

24.VII.1995. Tadeu (1 F, IBSP 10811); Diadema. 30.VII.1995. R. Bertani & F. Palinger (1 F **Neotype**, IBSP 8027); Diadema. 30.VII.1995. R. Bertani et al. (1 F, IBSP 10791); Embu. 30.V.1989. D. Catunda (1 M, IBSP 10790); Embu-Guaçu. 6.XII.1999. A.A. Reis (1 M, IBSP 7964); Guararema. 20.VIII.1979. M. do C. Ruiz (1 M, IBSP 1910 L); Ilhabela, Ilha de São Sebastião. (1 F, IBSP 3666); Ilhabela, Ilha de São Sebastião. 1963. Urban (1 young, MZSP C3922); Itapecerica da Serra (1 M, IBSP 10805); Juquiazinho (may be Tapiraí, Juquiazinho trail or Peruíbe, Juquiazinho beach). (1 F, IBSP 1910 H (ex 4031)); Juquitiba. (1 F, IBSP 1910 D); Juquitiba. (1 F, IBSP 1910 K); Juquitiba. 07.XI.1983. H. Campos (1 young, IBSP 10797); Juquitiba. 18.VIII.1986. I. Biasi (1 M, IBSP 10794); Juquitiba. 26.V.1995. Prefeitura Municipal de Juquitiba (1 M, IBSP 10795); Mauá. 27.VIII.1998. E. Nechar (1 M, IBSP 10801); Miracatu. (1 F, IBSP 1910 F); Miracatu. 05.VI.2000. M. A. Yamasol (2 F, IBSP 8368); Mogi das Cruzes. (1 F, IBSP 3349); Mogi das Cruzes. VIII.1941. J. Meissner (1 F, MZSP 3154); Mogi das Cruzes. (1 M, IBSP 3801); Mongaguá. 16.IV.1961. (3 F, 1 young, IBSP 1910 O); Piedade. (1 F, IBSP 1910 G); Praia Grande. (1 young, IBSP 3383 B); Praia Grande. 17.VI.1949. J. Dotta (2 F, 1 M, 1 young, IBSP 1910 P); Raposo Tavares Highway, Km 31. (1 M, IBSP 3802); Ribeirão Grande, Sumidouro. 1–9.VI.2003. R. Bernils & Stender (1 M, MNRJ 04176); Ribeirão Pires. (1 F, IBSP 1910 B); Rio Grande da Serra. 5.II.1986. L. C. Genova (1 F, IBSP 10800); Salesópolis, Boracéia. 07.IX.1966. N. Papavero (1 M, MZSP 5656); Santo André, Alto da Serra. 18.III.1943. F. Lane & B. Soares (1 young, MZSP 26188); Santo André, Paranapiacaba. VI.1980. (1 F, IBSP 1910 I); Santo André, Paranapiacaba. (1 M, IBSP 3496); Santos, Serra de Santos, Meio da Serra. 09.IV.1956. Portugal & Tremoços (1 F, MZSP 1246); Santos-Jundiaí railway, Km 38. (1 M, IBSP 1910 J); São Bernardo do Campo. 06.IX.1996. Glasurit do Brasil (1 M, IBSP 10803); São Bernardo do Campo. 01.IV.1999. L.C. Aihara (1 F, IBSP 10799); São Lourenço da Serra. 12.IX.2001. A. Leme (1 M, IBSP 9188); São Paulo. (1 F, IBSP 3482); São Paulo. (1 F, IBSP 3591); São Paulo. 1920. E. Garbe (1 F, MZSP 325); São Paulo. 29.V.1998. O. Luiz (2 M, IBSP 8251); São Paulo, Caucaia. (1 young, IBSP 3530); São Paulo, Horto Florestal. (1 F, IBSP 2980); São Paulo, Horto Florestal. (1 M, IBSP 2974); São Paulo, Itaquera. 18.VI.1998. S. Lellis (1 M, IBSP 8249); São Paulo, near Guarapiranga dam. 29.VIII.2002. (1 F, IBSP 9865); São Paulo, Jaraguá. 20.V.1971. (1 M, IBSP 1910 M); São Paulo, Tucuruvi. 4.VII.1986. (1 M, IBSP 1910 C); Tapiraí. 6.V.2003. C.A. Falcetti (1 F, IBSP 10158).

Doubtful records.—The following records, representing juvenile specimens that could not be assigned to either *T. rufa* or *T. venosa*, are in the region between the ranges of the two species. BRAZIL: *São Paulo*: Ubatuba. 13.X.1985. R.L.C. Baptista (1 young, MNRJ 04174); Ubatuba, Praia Domingos Dias. 24.VI.1975. (1 young, IBSP 1910 A). *São Paulo?*: Serra da Bocaina. 01–31.VII.1961. M.A. Vulcano (1 young, MZSP 21689); Serra da Bocaina, Fazenda Bonito. 01–28.I.1963. M.A. Vulcano (1 young, MZSP 21689);

Comments.—Since the redescription of *Trechona venosa* (Pedroso & Baptista 2004), we examined many additional specimens of *T. rufa*, which allowed us to clearly separate it from the former species. Therefore, *T. rufa* is herein considered a valid species and removed from the synonymy of *T. venosa*.

Unfortunately, the dry, pinned holotype and the other specimens of *T. rufa* cited by Vellard (1924) were lost, as the arachnological collection of the Fundação Oswaldo Cruz (FIOCRUZ), Rio de Janeiro, was entirely destroyed, according to the former curator of Entomology, S. Oliveira (pers. comm.). Therefore, a neotype for *T. rufa*, collected at its type-locality, is herein designated.

The geographical boundary between *T. rufa* and *T. venosa* seems to fall somewhat along the coastal forests from eastern São Paulo and western Rio de Janeiro states (see Fig. 9). Recently, we examined two males of *T. rufa* from Caraguatatuba, which extends the species range far to the east. On the other hand, the westernmost record for *T. venosa* is Rio de Janeiro, Rio de Janeiro state. We were able to examine only immature specimens from intermediate loealities, as Ubatuba, São Paulo state, and Paraty, Rio de Janeiro state, but it is not possible to make an accurate determination as they do not bear the characters used to diagnose *Trechona* species. Additional mature specimens from intermediate localities, as Angra dos Reis, Paraty or Ubatuba, would allow a more accurate determination of the distribution of both species.

Trechona adspersa Bertkau 1880

T. a. Bertkau 1880a:30.
T. a.: Bücherl 1957:386.

Trechona adspersa was based on a male holotype from Pedra-Açu, Teresópolis, Rio de Janeiro state, Brazil. The holotype should be deposited at the Institut Royal de Sciences Naturelles de Belgique (IRNSB). Most arachnids collected by the Belgian mission to Brazil and published in the same paper as *T. adspersa* were deposited in that museum., including 6 species of opilions (Kury 2003). Unfortunately, the holotype was not found in the IRNSB (L. Baert, pers. comm.) and is probably lost. The original deseription and illustration (pl. 1,

fig. 9) given by Bertkau (1880) shows a small spider (body length 11 mm), with many white spots arranged in transverse stripes and a male tarsus bearing an incrassate and short tibia and a copulatory bulb tapering regularly up to the tip of the embolus. Those characters strongly suggest some nemesiid species from southeastern Brazil. Additionally, a small female belonging to an undescribed nemesiid genus, collected in Teresópolis (MNRJ), agrees very well with the description of *T. adspersa*. Thus, *Trechona adspersa* Bertkau 1880 is herein considered a Nemesiidae ***incertae sedis***.

Trechona lycosiformis (C.L. Koch 1842)

Mygale l. C.L. Koch 1842:85
T. l.: C.L. Koch 1850:74.

Mygale lycosiformis was based on a female from Brazil and was subsequently transferred to the genus *Trechona* by C.L. Koch (1850). The holotype should probably be deposited at the Zoologische Sammlung, Museum für Naturkunde der Humboldt-Universität, Berlin (ZMHB), along with most material described by C.L. Koch, or at the Zoologische Staatssammlung München (ZSMC), taking into account that the holotype belongs to the Perty collection. However, there is no mention of *Mygale lycosiformis* Koch 1842 (or *T. lycosiformis*) in the online catalog of the ZMHB arachnological collection (available at the SysTax site), although many other species described by C.L. Koch in 1842 are deposited there. Also, after our request, the curators of the Arachnida collection from ZMHB, Dr. Jason Dunlop, and from ZMSC, Dr. Roland Melzer, informed us that they were not able to locate any specimen of *M. lycosiformis* in the respective collections (pers. comm.). Therefore, the holotype is considered lost. Based on the partial description and illustration (fig. 745) given by Koch (1842), this species is clearly not a *Trechona*. The uniformly brown color, without contrasting stripes on the abdomen, the hirsute body, the short spinnerets and the leg shape and proportion show that *Mygale lycosiformis* is a Theraphosidae *incertae sedis*. The preoccupied generic name *Mygale* Lamarek 1802 was replaced by *Avicularia* Lamarck 1818. However, it is evident that *M. lycosiformis* does not belong to *Avicularia* as shown by its brown color and legs covered by moderately short and relatively sparse setae. Unfortunately, as this species eannot be placed with any certainty in one of the numerous Theraphosidae genera, we therefore consider the name *Mygale lycosiformis* as *Avicularia lycosiformis* (C.L. Koch 1842) ***comb. nov.***, ***nomen dubium***. It will be added to the already extensive list of 29 ***nomina dubia*** in *Avicularia* (Platnick 2008).

Trechona rogenhoferi (Ausserer 1871)

Diplura r. Ausserer 1871:179.
Eudiplura r.: Simon 1892:179.
Eudiplura r.: Fischel 1927:67.
T. r.: Raven 1985a:75.

Raven (1985) examined the holotype of *T. rogenhoferi*, from Brazil (no further data), and pointed out that the speeimen has the typical lyra of *Trechona*, but had not indicated if it was mature or not. However, the small body size (19 mm) and the spinnerets as long as the abdomen (Ausserer 1871), indicate that it is a young specimen. The male from Brazil identified as *T. rogenhoferi* by Simon, cited and well-illustrated by Raven (1985:figs. 24–30), is clearly a male of *T. venosa*, as shown by the pyriform bulb (fig. 25) and deeply notched metatarsi, with a large spiniform apophysis (fig. 26). However, there is no indication if it is really conspecific with the holotype of *T. rogenhoferi*. Hence, this species is herein considered as a *nomen dubium*, as there is no indication of a precise type locality and very young specimens are not identifiable to species level. It is noteworthy to point out that *T. rogenhoferi* may be a junior synonym of *T. venosa* (if collected in Rio de Janeiro state) or a senior synonym of *T. rufa* (if collected in São Paulo state).

Trechona sericata Karsch 1879

T. s. Karsch 1879:545.

Trechona sericata was based on a female holotype from Bogotá, Colombia (body 34 mm long). The holotype is a pinned, dry speeimen, deposited at the Zoological Museum, Humboldt University, Berlin (ZMHB). We were able to examine a photograph of the holotype habitus, kindly sent by ZMHB curator, Dr. Jason Dunlop. Aecording to the photo and the original description (Karsch 1879), the holotype has posterior lateral spinnerets 1.5 × longer than the body and no transverse stripes on the abdomen. Also, Karsch had not cited any clavate setae on the pedipalp coxa. All the typieal *Trechona* species have shorter spinnerets (up to 70% of the length of the abdomen), transverse stripes on the abdomen and a thick plate of clavate setae on the pedipalp coxa. So, *Trechona sericata* should be excluded from the genus. The elongated spinnerets and legs with flexible tarsi indicate that this species might belong to *Linothele* Karsch 1879, or to *Ischnothele* Ausserer 1875. *Linothele* is a common genus in Colombia, with some species bearing very long spinnerets and flexible tarsi. *Ischnothele* is also found in Colombia, represented by *Ischnothele caudata* Ausserer 1875, a widespread species and the only one known to occur in that country (Coyle 1995). Taking into consideration the elongated abdomen, the relatively long legs, the shape of the carapace and the wide eye region of the holotype, it is evident that *T. sericata* belongs to *Linothele*, resembling *L. megatheloides* Paz & Platnick 1977. So, *Trechona sericata* = *Linothele sericata* (Karsch, 1879) ***comb. nov.***

DISCUSSION

Taking in account the changes above, only three valid species (*T. venosa*, *T. rufa*, *T. uniformis* Mello-Leitão 1935) and a *nomen dubium* (*T. rogenhoferi*) remain in the genus. All the valid species are restricted to the Atlantic Forest of Brazil. The records of *T. venosa* (Latreille 1832) for Amazonia and British Guyana are clearly misidentifications, as pointed out by Pedroso & Baptista (2004). Also, we have not found any specimens of *Trechona* from outside the Atlantic Forest in the examined collections or during our field trips to other regions.

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